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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

JACOBS, LASHONDA T

ART UNIT

PAPER NUMBER

2157

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/770,427

Applicant(s)

SECEP, SEMIH

Examiner

LaShonda T. Jacobs

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on October 3, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 and 37-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 and 37-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This Office Action in response to Applicant's Amendment/Request for Reconsideration filed on October 3, 2005. Claims 1-35 and 37-63 are presented for further examination.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1-35** and **37-63** are rejected under 35 U.S.C. 102(b) as being anticipated by Vaishnavi et al (hereinafter, "Vaishnavi", U.S. Pat. No. 5,734,642).

As per claim **1**, Vaishnavi discloses a method for implementing a state model for managing a network coupled to a central management system, said method comprising:

- presenting a user interface a management system to enable a user to define at least one state model for managing at least one network element based on a determined state of said at least one network element (col. 4, lines 28-40);
- presenting a user interface for said central management system to enable a user to define at least one poll service that includes at least one of said at least one state model (col. 5, lines 3-16 and col. 6, lines 26-42); and

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- executing said at least one poll service to manage said at least one network element (col. 5, lines 43-56).

As per claim **35**, Vaishnavi discloses a method for enabling state-based management of a network, wherein network elements are managed based on their state, said method comprising:

- receiving input from a user at a management system to define at least one state model for managing at least one network element based on a determined state of said at least one network element (col. 4, lines 28-40);
- receiving input from a user at said management system to define at least one poll service that includes at least one of said at least one state model (col. 5, lines 3-16 and col. 6, lines 26-42);
- distributing said at least one poll service including said at least one state model to at least one distributed polling gateway that is communicatively coupled with said at least one network element (col. 5, lines 3-16);
- executing said at least one poll service at said at least one distributed polling gateway to manage said at least one network element (col. 5, lines 43-56); and
- wherein said management system is a central management system (col. 4, lines 5-22).

As per claim **48**, Vaishnavi discloses a system for managing network elements based on their state, said system comprising:

- at least one network element (col. 3, lines 57-65);
- one or more distributed gateways for monitoring said at least one network element, said one or more distributed gateways communicatively coupled to a central management

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system between said at least one network element and said central management system (col. 4, lines 5-22 and col. 5, lines 3-16); and

- at least one state model and managing said at least one network element based on a determined state of said at least one network element, said at least one state model capable of being dynamically defined during runtime (col. 6, lines 26-39).

As per claim **59**, Vaishnavi discloses a method for performing state-based management of a network, wherein network elements are managed based on their state, said method comprising:

- executing, on at least one distributed gateway located between the central management system and the network elements at least one user-defined state model for managing at least one network element based on a determined state of said at least one network element, wherein said executing at least one user-defined state model includes polling said at least one network element for data, evaluating said data to determine whether a user-defined state transition condition is satisfied, and triggering a state transition if said user-defined state transition condition is satisfied for a user-defined number of consecutive polls of said at least one network element (col. 4, lines 5-22 and col. 5, lines 3-16).

As per claim **64**, Vaishnavi discloses a system for managing at least one network element comprising:

- at least one network element (col. 3, lines 57-65);
- at least one gateway for monitoring said at least one network element, said at least one gateway communicatively coupled to a central management system between said at

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least one network element and said central management system (col. 4, lines 5-22 and col. 5, lines 3-16); and

- at least one state model executing on said at least one gateway for managing said at least one network element based on a determined state of said at least one network element, said at least one state model capable of being dynamically defined during runtime (col. 6, lines 26-39).

As per claim **2**, Vaishnavi further discloses:

- distributing said at least one poll service to at least one distributed polling gateway that is communicatively coupled with said at least one network element (col. 3, lines 57-66); and
- communicatively coupling said user interface to said at least one distributed polling gateway (col. 4, lines 28-40).

As per claims **3** and **37**, Vaishnavi discloses:

- distributing said at least one poll service defined by said user (col. 5, lines 3-12).

As per claim **4**, Vaishnavi discloses:

- distributing said at least one poll service defined by said user a plurality of distributed polling gateways for execution thereon (col. 3, lines 57-66).

As per claim **5**, Vaishnavi discloses:

- wherein said gateways each have the ability to communicate with one or more network elements in a particular one of communication protocols selected from the group consisting of: SNMP protocol and CMIP protocol (col. 5, lines 23-42).

As per claims **6** and **38**, Vaishnavi discloses:

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- wherein said at least one distributed polling gateway filters data (col. 6, lines 9-20).

As per claim **8**, Vaishnavi discloses:

- wherein said at least one distributed polling gateway executing software to evaluate a user-defined state model condition to determine whether to execute each of said at least one state model (col. 4, lines 5-22 and col. 5, lines 3-16).

As per claims **7**, **39** and **52**, Vaishnavi discloses:

- wherein said at least one distributed polling gateway communicating data satisfying said at least one state model to said central management system (col. 6, lines 26-42).

As per claim **9**, Vaishnavi discloses:

- wherein said state model condition specifies that said at least one state model is to be executed only for particular network elements (col. 6, lines 26-42).

As per claim **10**, Vaishnavi discloses:

- wherein said at least one distributed polling gateway retrieving from said at least one network element needed values for values defined for said at least one state model (col. 6, lines 9-20).

As per claim **11**, Vaishnavi discloses:

- wherein said at least one distributed polling gateway executing software to evaluate one or more user-defined equations for said at least one state model utilizing the retrieved variable values (col. 4, lines 5-22 and col. 5, lines 3-16).

As per claims **12**, **40** and **53**, Vaishnavi discloses:

- wherein said at least one distributed polling gateway executing software to evaluate one or more user-defined state transition conditions for said at least one state model to

determine whether said one or more user-defined state transition conditions are satisfied (col. 4, lines 5-22 and col. 6, lines 26-42).

As per claim **13**, Vaishnavi discloses:

- wherein said at least one distributed polling gateway determining that said one or more user-defined state transition conditions are not satisfied, then the state of said at least one network element remains unchanged (col. 4, lines 5-22 and col. 6, lines 26-42).

As per claims **14**, **41** and **54**, Vaishnavi discloses:

- wherein said at least one distributed polling gateway determining that said one or more user-defined state transition conditions are satisfied, then a state transition for said at least one network element is triggered (col. 4, lines 5-22 and col. 6, lines 26-42).

As per claim **16**, Vaishnavi discloses:

- wherein said at least one distributed polling gateway determining that said one or more user-defined state transition conditions are satisfied in a user-defined number of consecutive polls of said at least one network element, then a state transition for said at least one network element is triggered (col. 4, lines 5-22 and col. 6, lines 26-42).

As per claims **15**, **17**, **42** and **55**, Vaishnavi discloses:

- wherein one or more user-defined transition actions for said state transition are triggered in response to said state transition (col. 5, lines 3-16).

As per claims **18** and **43**, Vaishnavi discloses wherein said presenting a user interface on a management system to enable a user to define at least one state model, further comprises:

- providing a user interface that allows a user to define a plurality of states within a state model for a network element (col. 4, lines 28-40 and col. 6, lines 26-42);

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- providing a user interface that allows a user to define at least one transition condition that specifies when a transition from one of said plurality of states to another of said plurality of states is to occur (col. 4, lines 28-40 and col. 6, lines 26-42); and
- providing a user interface that allows a user to define at least one transition action to be performed upon the occurrence of said transition (col. 4, lines 28-40 and col. 6, lines 26-42).

As per claims **19** and **44**, Vaishnavi further discloses:

- correlating various different models of said at least one state model (col. 6, lines 26-42).

As per claims **20** and **45**, Vaishnavi discloses:

- wherein software code executes on at least one distributed polling gateway communicatively coupled to said central management system to perform said step of correlating (col. 6, lines 9-20).

As per claims **21** and **46**, Vaishnavi discloses:

- wherein said software code triggers an action upon a user-defined pattern of states of said various different models being achieved (col. 5, lines 3-16 and col. 6, lines 26-42).

As per claim **23**, Vaishnavi discloses wherein said at least one network element is selected from the group consisting of:

- ATM, Sonet, router, modem, CMIP EMS, switch OSS, NMS, and web server (col. 3, lines 57-66).

As per claim **24**, Vaishnavi discloses:

- wherein said user interface is a graphical user interface (col. 4, lines 29-40).

As per claim **25**, Vaishnavi discloses wherein said at least one state model includes:

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- software code specifying at least two user-defined states for said at least one network element (col. 4, lines 28-40 and col. 6, lines 26-42);
- software code specifying at least one transition from a first of said at least two user defined states to a second of said at least two user-defined states (col. 4, lines 28-40 and col. 6, lines 26-42); and
- software code specifying at least one transition action to be performed upon the occurrence of said at least one transition (col. 4, lines 28-40 and col. 6, lines 26-42).

As per claim **27**, Vaishnavi discloses wherein said transition action includes any one or more selected from the group consisting of:

- enabling a particular poll service for said at least one network element, disabling said particular poll service for said at least one network element, enabling a particular state model for said at least one network element, disabling said particular state model for said at least one network element, and triggering one or more user-defined commands to be executed (col. 5, lines 3-16).

As per claim **28**, Vaishnavi discloses wherein said executing said at least one poll service further includes:

- triggering execution of said at least one poll service in response to the occurrence of a user defined event (col. 5, lines 3-16).

As per claim **29**, Vaishnavi discloses:

- wherein said user-defined event includes a particular fault condition defined by a user (col. 4, lines 5-22 and col. 6, lines 26-42).

As per claim **30**, Vaishnavi discloses:

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- wherein said at least one poll service is executed only if a user-defined activation condition for said at least one poll service is satisfied (col. 4, lines 5-22 and col. 6, lines 26-42).

As per claim **31**, Vaishnavi discloses:

- wherein said user-defined activation condition specifies that said poll service is for a particular type of network element (col. 5, lines 23-42).

As per claim **32**, Vaishnavi discloses:

- wherein said central management system enables a user to dynamically define said at least one poll service during runtime (col. 4, lines 5-22 and col. 6, lines 26-42).

As per claim **33**, Vaishnavi discloses:

- wherein said central management system enables a user to dynamically define said at least one state model during runtime (col. 4, lines 5-22 and col. 6, lines 26-42).

As per claim **34**, Vaishnavi discloses:

- wherein said central management system enables a user to dynamically modify an existing poll service or state model during runtime (col. 4, lines 5-22 and col. 6, lines 26-42).

As per claims **49** and **61**, Vaishnavi discloses:

- wherein said at least one distributed polling gateway software executing on said central management system to enable a user to define said at least one state model, wherein once a user defines said at least one state model (col. 26-42).

As per claim **50**, Vaishnavi further discloses:

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- at least one user-defined poll service that includes one or more of said at least one state model (col. 5, lines 23-42).

As per claim **51**, Vaishnavi discloses:

- software executing on said central management system to enable a user to define said at least one poll service, wherein once a user defines said at least one poll service, it is communicated to said one or more distributed gateways for execution thereon (col. 4, lines 5-22 and col. 6, lines 26-42).

As per claim **56**, Vaishnavi discloses:

- at least one pattern-based state model executing thereon to correlate various of said at least one state model (col. 7, lines 9-16).

As per claim **57**, Vaishnavi discloses:

- wherein said at least one pattern-based state model specifies a user-defined pattern of states of said various models, and wherein said at least one pattern-based state model triggers an action upon said user-defined pattern of states being achieved (col. 7, lines 9-16).

As per claim **60**, Vaishnavi discloses:

- wherein said user-defined number of consecutive polls is a plurality of polls (col. 5, lines 3-16).

As per claim **62**, Vaishnavi discloses:

- wherein if said user-defined state transition condition is satisfied for a user-defined number of consecutive polls of said at least one network element, then one or more

user-defined transition actions for the user defined state transition are triggered (col. 5, lines 3-16 and col. 6, lines 26-42).

As per claims **22, 26, 47, 58** and **63**, Vaishnavi discloses wherein said action includes any one or more selected from the group consisting of:

- generating a user alert, clearing said user alert, starting particular services for said at least one network element, stopping said particular services for said at least one network element, changing the interval utilized to poll said at least one network element, enabling a particular poll service for said at least one network element, disabling said particular poll service for said at least one network element, enabling a particular state model for said at least one network element, disabling said particular state model for said at least one network element, triggering one or more user-defined commands to be executed, triggering communication of an email message to personnel, triggering a page of personnel, logging achievement of said pattern of states to a file, and performing network element configuration (col. 5, lines 3-16 and col. 6, lines 26-42).

Response to Arguments

5. Applicant's arguments with respect to claims 1-35 and 37-64 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,199,172 to Dube et al

U.S. Pat. No. 5,261,044 to Dev et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShonda T. Jacobs whose telephone number is 571-272-4004. The examiner can normally be reached on 8:30 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LaShonda T Jacobs
Examiner
Art Unit 2157

December 1, 2004⁵

LaShonda T Jacobs
12/11/05